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* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	DEC 01	ChemPort single article sales feature unavailable
NEWS	3	APR 03	CAS coverage of exemplified prophetic substances enhanced
NEWS	4	APR 07	STN is raising the limits on saved answers
NEWS	5	APR 24	CA/CAPLUS now has more comprehensive patent assignee information
NEWS	6	APR 26	USPATFULL and USPAT2 enhanced with patent assignment/reassignment information
NEWS	7	APR 28	CAS patent authority coverage expanded
NEWS	8	APR 28	ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS	9	APR 28	Limits doubled for structure searching in CAS REGISTRY
NEWS	10	MAY 08	STN Express, Version 8.4, now available
NEWS	11	MAY 11	STN on the Web enhanced
NEWS	12	MAY 11	BEILSTEIN substance information now available on STN Easy
NEWS	13	MAY 14	DGENE, PCTGEN and USGENE enhanced with increased limits for exact sequence match searches and introduction of free HIT display format
NEWS	14	MAY 15	INPADOCDB and INPAFAMDB enhanced with Chinese legal status data
NEWS	15	MAY 28	CAS databases on STN enhanced with NANO super role in records back to 1992
NEWS	16	JUN 01	CAS REGISTRY Source of Registration (SR) searching enhanced on STN
NEWS	17	JUN 26	NUTRACEUT and PHARMAML no longer updated
NEWS	18	JUN 29	IMSCOPROFILE now reloaded monthly
NEWS	19	JUN 29	EPFULL adds Simultaneous Left and Right Truncation (SLART) to AB, MCLM, and TI fields
NEWS	20	JUL 09	PATDPAFULL adds Simultaneous Left and Right Truncation (SLART) to AB, CLM, MCLM, and TI fields
NEWS	21	JUL 14	USGENE enhances coverage of patent sequence location (PSL) data
NEWS	22	JUL 27	CA/CAPLUS enhanced with new citing references
NEWS	23	JUL 16	GBFULL adds patent backfile data to 1855
NEWS	24	JUL 21	USGENE adds bibliographic and sequence information
NEWS	25	JUL 28	EPFULL adds first-page images and applicant-cited references
NEWS	26	JUL 28	INPADOCDB and INPAFAMDB add Russian legal status data

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:45:32 ON 05 AUG 2009

=> file caplus

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FULL ESTIMATED COST	0.22	0.22

FILE 'CAPLUS' ENTERED AT 10:45:54 ON 05 AUG 2009

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FILE COVERS 1907 - 5 Aug 2009 VOL 151 ISS 6

FILE LAST UPDATED: 4 Aug 2009 (20090804/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAPLUS family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 22.

=> s copper and (inhibit near polymerization)

1055590 COPPER

517 COPPERS

1055668 COPPER

(COPPER OR COPPERS)

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257769 INHIBIT
159904 INHIBITS
391850 INHIBIT
      (INHIBIT OR INHIBITS)
661594 NEAR
      385 NEARS
661930 NEAR
      (NEAR OR NEARS)
377734 POLYMERIZATION
      4468 POLYMERIZATIONS
378435 POLYMERIZATION
      (POLYMERIZATION OR POLYMERIZATIONS)
388627 POLYMN
      10499 POLYMNS
390021 POLYMN
      (POLYMN OR POLYMNS)
524987 POLYMERIZATION
      (POLYMERIZATION OR POLYMN)
      0 INHIBIT NEAR POLYMERIZATION
        (INHIBIT(W)NEAR(W)POLYMERIZATION)
L1      0 COPPER AND (INHIBIT NEAR POLYMERIZATION)

=> s(inhibit near polymerization)
S(INHIBIT IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s(inhibit near polymerization)
S(INHIBIT IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s (inhibit near polymerization)
      257769 INHIBIT
      159904 INHIBITS
      391850 INHIBIT
        (INHIBIT OR INHIBITS)
      661594 NEAR
        385 NEARS
      661930 NEAR
        (NEAR OR NEARS)
      377734 POLYMERIZATION
        4468 POLYMERIZATIONS
      378435 POLYMERIZATION
        (POLYMERIZATION OR POLYMERIZATIONS)
      388627 POLYMN
        10499 POLYMNS
      390021 POLYMN
        (POLYMN OR POLYMNS)
      524987 POLYMERIZATION
        (POLYMERIZATION OR POLYMN)
L2      0 (INHIBIT NEAR POLYMERIZATION)
        (INHIBIT(W)NEAR(W)POLYMERIZATION)

=> s (polymerize or polymerization) and (inhibit or inhibitor)
      10299 POLYMERIZE
      3381 POLYMERIZES
      13406 POLYMERIZE
        (POLYMERIZE OR POLYMERIZES)
      377734 POLYMERIZATION

```

```

    4468 POLYMERIZATIONS
378435 POLYMERIZATION
      (POLYMERIZATION OR POLYMERIZATIONS)
388627 POLYMN
    10499 POLYMNS
390021 POLYMN
      (POLYMN OR POLYMNS)
524987 POLYMERIZATION
      (POLYMERIZATION OR POLYMN)
257769 INHIBIT
159904 INHIBITS
391850 INHIBIT
      (INHIBIT OR INHIBITS)
622493 INHIBITOR
612789 INHIBITORS
962375 INHIBITOR
      (INHIBITOR OR INHIBITORS)
L3      19901 (POLYMERIZE OR POLYMERIZATION) AND (INHIBIT OR INHIBITOR)

=> s 13 and copper
    1055590 COPPER
      517 COPPERS
    1055668 COPPER
      (COPPER OR COPPERS)
L4      615 L3 AND COPPER

=> s 14 and oxygen
    894567 OXYGEN
      7720 OXYGENS
    899940 OXYGEN
      (OXYGEN OR OXYGENS)
L5      36 L4 AND OXYGEN

=> s 15 and unsaturated and monomer
    60964 UNSATURATED
      1 UNSATURATEDS
    60965 UNSATURATED
      (UNSATURATED OR UNSATURATEDS)
246171 UNSATD
    13 UNSATDS
246174 UNSATD
      (UNSATD OR UNSATDS)
262652 UNSATURATED
      (UNSATURATED OR UNSATD)
219876 MONOMER
183373 MONOMERS
349277 MONOMER
      (MONOMER OR MONOMERS)
L6      3 L5 AND UNSATURATED AND MONOMER

=> d 16 1-3 abs ibib

L6      ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2009 ACS on STN
AB      The method comprises pulverizing tar waste residue from production of catechol
and hydroquinone and using the pulverized tar residue alone or in
combination with a copper salt, nitrogen-oxygen free
radical compound, phenolic compound or amine as polymerization
inhibitor of unsatd. compound monomer.  The
above tar waste residue is composed of hydroquinone 1-15,
2,2'-dihydroxydiphenyl ether 2-15, 4,2'-dihydroxydiphenyl ether 2-15,
4,4'-dihydroxydiphenyl ether 1-10% and addnl. polyhydroxy Ph ether compds.
with C, H and O contents of 60-75, 3-5 and 21-36%, resp.  The

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copper salt is copper sulfate, copper acetate, copper nitrate, copper dialkyldithiocarbamate, copper benzoate or copper stearate. The nitrogen-oxygen free radical compound is di-tert-Bu nitrogen-oxygen free radical compound or piperidine nitrogen-oxygen free radical compound. The phenolic compound is hydroquinone, 4-methyl-6-tert-butylphenol, 4-tert-butyl-catechol or p-hydroxybenzyl ether. The amine compound is N-isopropyl-N'-phenyl-p-phenylenediamine, methylaniline, diphenylamine, benzidine, etc. The unsatd. compound monomer is allyl alc., vinyl acetate, allyl acetate, acrolein, methylacrolein, acrylic acid, methacrylic acid, acrylate, methacrylate, acrylonitrile, styrene, divinylbenzene, chloroethylene, cinnamic alc., cinnamic acid or cinnamaldehyde. The method can reduce discharge of tar waste residue, lower energy consumption, reduce pollution to environment. The polymerization inhibitor has good effect and low cost.

ACCESSION NUMBER: 2008:997489 CAPLUS
 DOCUMENT NUMBER: 149:334467
 TITLE: Method for reutilization of tar waste residues from production of catechol and hydroquinone
 INVENTOR(S): Cui, Yao; Xu, Ning; Tang, Yong; Zhang, Chunlei; Ma, Jianxue
 PATENT ASSIGNEE(S): Shanghai Huayi Acrylic Acid Co., Ltd., Peop. Rep. China
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 10pp.
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101240169	A	20080813	CN 2008-10034423	20080310
PRIORITY APPLN. INFO.:			CN 2008-10034423	20080310

L6 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
 AB The invention provides a composition comprising: (a) a star polymer comprising: (i) a core portion comprising a polyvalent (meth)acrylic monomer, oligomer or polymer thereof or a polyvalent divinyl non-acrylic monomer, oligomer or polymer thereof; and (ii) at least two arms of polymerized alkyl(meth)acrylate ester; and (b) an oil of lubricating viscosity, wherein the core portion further comprises a functional group (I): $-\text{CH}_2-\text{C}(\text{R}_1)(\text{C}(=\text{O})\text{A})-\text{Y}-(\text{I})$, wherein R1 is hydrogen, a linear or branched alkyl group containing 1 to 5 carbon atoms; A is nitrogen or oxygen; and Y is a free radical leaving group selected from the group consisting of one or more atoms or groups of atoms which may be transferred by a radical mechanism under the polymerization conditions, a halogen, an $-\text{O}-\text{N}=\text{}$ group and an $-\text{S}-\text{C}(=\text{S})-$ group. The invention further provides the use of the composition in an oil of lubricating viscosity as a dispersant, a viscosity modifier or a precursor to a dispersant viscosity modifier.

ACCESSION NUMBER: 2007:1179276 CAPLUS
 DOCUMENT NUMBER: 147:471843
 TITLE: Star polymers and compositions thereof
 INVENTOR(S): Visger, Daniel C.; Davies, Mark; Price, David; Baum, Marina; Schober, Barton J.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 20pp., Cont.-in-part of Appl. No. PCT/US2005/038146.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070244018	A1	20071018	US 2007-738572	20070423
WO 2006047398	A2	20060504	WO 2005-US38146	20051021
WO 2006047398	A3	20060810		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2004-621875P P 20041025
WO 2005-US38146 A2 20051021

OTHER SOURCE(S): MARPAT 147:471843

L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
AB Materials for making apparatus and a method of inhibiting polymerization during manufacture, purification, handling and storage of ethylenically unsatd. monomers are described. In particular, copper or metals containing copper, in the presence of oxygen, inhibit undesired polymerization resulting in polymer fouling in apparatus used during the manufacture, purification, handling, and storage of the monomers, such as acrylic acid, methacrylic acid, acrylic acid esters, methacrylic acid esters, etc. The copper or copper alloys in the presence of an oxygen-containing gas exhibit self-inhibiting surface characteristics when used to make at least a portion of the apparatus to inhibit polymerization of the monomers in contact with the portion of the apparatus including such copper-containing metal.

ACCESSION NUMBER: 2005:395245 CAPLUS

DOCUMENT NUMBER: 142:430735

TITLE: Copper metal or alloy surfaces and oxygen to inhibit ethylenically unsaturated monomer polymerization in processing apparatus

INVENTOR(S): Aldrett-Lee, Salvador; Allen, Diane Elisabeth; Fruchey, Olan Stanley; Roundy, Roger L.; Wang, Tao

PATENT ASSIGNEE(S): Dow Global Technologies Inc., USA

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005040084	A1	20050506	WO 2003-US30076	20030924
W: CA, JP, MX, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
EP 1667953	A1	20060614	EP 2003-754867	20030924

EP 1667953	B1	20081210		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
JP 2007521242	T	20070802	JP 2005-509905	20030924
AT 417032	T	20081215	AT 2003-754867	20030924
MX 2006003342	A	20060608	MX 2006-3342	20060324
US 20080228002	A1	20080918	US 2006-571797	20060719
PRIORITY APPLN. INFO.:			WO 2003-US30076	W 20030924

```
=> s 15 and unsaturated
    60964 UNSATURATED
      1 UNSATURATEDS
    60965 UNSATURATED
      (UNSATURATED OR UNSATURATEDS)
    246171 UNSATD
      13 UNSATDS
    246174 UNSATD
      (UNSATD OR UNSATDS)
    262652 UNSATURATED
      (UNSATURATED OR UNSATD)
L7      3 L5 AND UNSATURATED
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=> s 15 and acrylic
ACRYLIC IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
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=> s 15 and acrylic
    317736 ACRYLIC
      1476 ACRYLICS
    318140 ACRYLIC
      (ACRYLIC OR ACRYLICS)
L8      16 L5 AND ACRYLIC
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=> s 18 and pd<20040900
    24978596 PD<20040900
      (PD<20040900)
L9      9 L8 AND PD<20040900
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=> d 19 1-9 abs ibib
```

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L9  ANSWER 1 OF 9  CAPLUS  COPYRIGHT 2009 ACS on STN
AB  A method is described which produces acrylic acid in a high
    yield while maintaining the conditions for purifying acrylic
    acid in constant ranges and preventing the acrylic acid from
    polymerization By using a reactor which has a first reaction zone and a
    second reaction zone formed of different reaction tubes, propylene
concentration
    adjusting, from 7-15 volume%, and water concentration adjusting, from 0-10
volume%,
    are introduced thereby obtaining an acrolein-containing gas which is subjected
    to reoxidn. to produce an acrylic acid-containing gas. Then the
    acrylic acid-containing gas is introduced into an acrylic
    acid absorption column to adjust the water concentration in the range of 1-45%,
    thereby preventing it from polymerization A process flow diagram is
    presented.
ACCESSION NUMBER:      2004:117247  CAPLUS
DOCUMENT NUMBER:      140:164344
TITLE:                Oxidative method for production of acrylic
                      acid from propylene and oxygen
```

INVENTOR(S): Hirao, Harunori; Matsumoto, Yukihiro; Sanada, Kenji;
Nishimura, Takeshi
PATENT ASSIGNEE(S): Nippon Shokubai Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1388533	A1	20040211	EP 2003-254931	20030807 <--
EP 1388533	B1	20080618		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004067615	A	20040304	JP 2002-231448	20020808 <--
US 20040063998	A1	20040401	US 2003-633170	20030801 <--
US 7109372	B2	20060919		
KR 2004014280	A	20040214	KR 2003-54129	20030805 <--
IN 2003KO00420	A	20050916	IN 2003-KO420	20030805
TW 259176	B	20060801	TW 2003-92121431	20030805
CN 1480442	A	20040310	CN 2003-127421	20030806 <--
CN 100341841	C	20071010		

PRIORITY APPLN. INFO.: JP 2002-231448 A 20020808
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN
AB A method is described which produces acrylic acid in a high yield as maintaining the conditions for purifying acrylic acid in constant ranges and preventing the acrylic acid from polymerization By using a reactor which has first reaction zone and second reaction zone formed of different reaction tubes, propylene concentration adjusting in the range of 7-15 volume% and water concentration adjusting in the range of 0-10 volume% are introduced thereby obtaining an acrylic acid-containing gas. Then the gas is introduced to an acrylic acid absorption column to adjust water concentration in the range of 1-45%, thereby preventing it from polymerization Process flow diagrams are presented.

ACCESSION NUMBER: 2004:117246 CAPLUS
DOCUMENT NUMBER: 140:164343
TITLE: Oxidative method for production of acrylic acid from propylene and oxygen
INVENTOR(S): Hirao, Harunori; Tanimoto, Michio
PATENT ASSIGNEE(S): Nippon Shokubai Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1388532	A1	20040211	EP 2003-254930	20030807 <--
EP 1388532	B1	20080618		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004067616	A	20040304	JP 2002-231449	20020808 <--

JP 3908118	B2	20070425		
US 20040030185	A1	20040212	US 2003-632762	20030801 <--
US 7038079	B2	20060502		
KR 2004014281	A	20040214	KR 2003-54130	20030805 <--
CN 1480441	A	20040310	CN 2003-127420	20030806 <--
SG 120111	A1	20060328	SG 2003-4220	20030806
BR 2003002812	A	20050503	BR 2003-2812	20030808
PRIORITY APPLN. INFO.:			JP 2002-231449	A 20020808
OS.CITING REF COUNT:	2	THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)		
REFERENCE COUNT:	6	THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L9 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AB The method preventing the clogging of an apparatus having a gas-phase part and/or liquid-phase part connected through a nozzle or piping to a measuring device for monitoring the process state of the (meth)acrylic acid and ester, comprises introducing a gas comprising at least one of an inert gas, oxygen, and a gas as polymerization inhibitor into the nozzle or piping connected to the gas-phase part of the apparatus at a flow rate of 0.03-1 m/s and introducing a liquid medium into the nozzle or piping connected to the liquid-phase part of the apparatus at a flow rate of 0.03-1 m/s. Thus, the apparatus for handling (meth)acrylic acid and the like can be stably and efficiently operated and the cost of the production or storage of (meth)acrylic acid can be reduced.

ACCESSION NUMBER: 2003:551483 CAPLUS

DOCUMENT NUMBER: 139:101526

TITLE: Method of preventing clogging of apparatus for handling (meth)acrylic acid and ester thereof

INVENTOR(S): Yada, Shuhei; Jinno, Kimikatsu; Ogawa, Yasushi; Suzuki, Yoshiro

PATENT ASSIGNEE(S): Mitsubishi Chemical Corporation, Japan

SOURCE: PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2003057658	A1	20030717	WO 2003-JP63	20030108 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2003267919	A	20030925	JP 2003-1290	20030107 <--
JP 3970183	B2	20070905		
AU 2003201911	A1	20030724	AU 2003-201911	20030108 <--
CN 1701058	A	20051123	CN 2003-801972	20030108
CN 100413841	C	20080827		
US 20040231722	A1	20041125	US 2004-879228	20040630
PRIORITY APPLN. INFO.:			JP 2002-1231	A 20020108

WO 2003-JP63 W 20030108
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
(5 CITINGS)

L9 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AB The production of acrylic acid by the heterogeneously catalyzed gas-phase partial oxidation of ≥ 1 C3 precursor(s) or C3 compd(s). (e.g., propylene) with mol. oxygen is described, where one cools the product-containing gas mixture and then subjects it to either a fractionating condensation or to a rectification process and adds phenothiazine and at least 1 phenolic polymerization-inhibiting compd(s). in the column head or in the range of the column head of the rectification and/or condensation columns.

ACCESSION NUMBER: 2002:484673 CAPLUS

DOCUMENT NUMBER: 137:47601

TITLE: Procedure for the manufacture of acrylic acid by the partial oxidation of C3 precursors or C3 molecules

INVENTOR(S): Hammon, Ulrich; Nestler, Gerhard; Schroeder, Juergen

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Ger. Offen., 8 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10064641	A1	20020627	DE 2000-10064641	20001222 <--
WO 2002051784	A1	20020704	WO 2001-EP15207	20011221 <--
W: BR, CN, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				

PRIORITY APPLN. INFO.: DE 2000-10064641 A 20001222

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L9 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AB The invention concerns a method for stabilizing acrylic monomers in a distillation column, comprising the following steps: adding ≥ 1 stabilizing agent for acrylic monomers having a total concentration in the liquid phase ranging between 1 ppm and 5000 ppm; injecting oxygen in the distillation column with a O2/organic vapor mol ratio ranging between 0.01 and 1%; adding a sequestering agent for metals such as pentasodium diethylenetriaminepentaacetate at concentration in the liquid phase ranging between 0.1 and 1000 ppm. The sequestering agent improves the stability of the acrylic monomers during the distillation

ACCESSION NUMBER: 2002:256211 CAPLUS

DOCUMENT NUMBER: 136:279841

TITLE: Method for stabilizing acrylic monomers

INVENTOR(S): Lepizzera, Stephane

PATENT ASSIGNEE(S): ATOFINA, Fr.

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002026685 A1 20020404 WO 2001-FR2965 20010925 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
FR 2814741 A1 20020405 FR 2000-12422 20000929 <--
FR 2814741 B1 20040227
AU 2001091986 A 20020408 AU 2001-91986 20010925 <--
EP 1324969 A1 20030709 EP 2001-972199 20010925 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
JP 2004513089 T 20040430 JP 2002-531072 20010925 <--
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KR 806558 B1 20080227 KR 2003-704262 20030325
US 20040011638 A1 20040122 US 2003-381795 20030716 <--
PRIORITY APPLN. INFO.: FR 2000-12422 A 20000929
WO 2001-FR2965 W 20010925
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN
AB The invention concerns a method for purifying a (meth)acrylic
monomer selected among (meth)acrylic acids and their esters, by
distillation in the presence of ≥ 1 polymerization inhibitor
requiring input of oxygen and/or an inhibitor having
better efficacy in the presence of oxygen for stabilizing the
liquid phase. The invention is characterized in that the distillation is
performed in the presence of a NO₂ gas, with an oxygen-organic
vapor ratio ranging between 0.02 and 3%, and with a NO₂-condensed organic
vapor ratio ranging between 0.01 and 50 ppm.
ACCESSION NUMBER: 2001:396825 CAPLUS
DOCUMENT NUMBER: 135:5974
TITLE: Method for purifying (meth)acrylic monomers
by distillation
INVENTOR(S): Fauconet, Michel; Lepizzera, Stephane
PATENT ASSIGNEE(S): ATOFINA, Fr.
SOURCE: PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001038285	A1	20010531	WO 2000-FR3172	20001115 <--
W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW	
RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG	
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 EP 1232138 B1 20051019
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
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 JP 4131005 B2 20080813
 CN 1220670 C 20050928 CN 2000-816268 20001115
 US 7029556 B1 20060418 US 2002-130989 20020930
 PRIORITY APPLN. INFO.: FR 1999-14777 A 19991124
 WO 2000-FR3172 W 20001115
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN
 AB A method for refining (meth)acrylic acid without polymn
 . during distillation comprises feeding a (meth)acrylic acid-containing
 solution (obtained by catalytic gas phase oxidation of propylene and/or
 acrolein) to a distillation column with the total concentration of C2-4
 aldehydes and
 acetone maintained at ≤ 2000 ppm based on the (meth) acrylic
 acid. Preferably the oxidation mixture contains isobutylene, tert-BuOH, and/or
 methacrolein. Using mol. oxygen and a polymerization
 inhibitor in the distillation further prevented polymerization Thus,
 acrylic acid containing acetaldehyde 30, acrolein 30, acetone 30, and
 phenothiazine 100 ppm was distilled at column bottom temperature 88° and 100
 mmHg showing no polymer formation after 8 h stable operation, compared
 with flooding within 1 h with 4800, 4900, 5100, and 100 ppm of the resp.
 compds. were present in the acrylic acid.

ACCESSION NUMBER: 2000:705081 CAPLUS
 DOCUMENT NUMBER: 133:282192
 TITLE: Purified (meth)acrylic acid and
 polymerization inhibition in method therefor
 INVENTOR(S): Sakamoto, Kazuhiko; Ueno, Kouji; Nakahara, Sei; Ueoka,
 Masatoshi
 PATENT ASSIGNEE(S): Nippon Shokubai Co., Ltd., Japan; Nippon Catalytic
 Chem. Ind.
 SOURCE: Eur. Pat. Appl., 10 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1041062	A2	20001004	EP 2000-302130	20000315 <--
EP 1041062	A3	20010117		
EP 1041062	B1	20030312		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2000290221	A	20001017	JP 1999-93859	19990331 <--
ZA 2000001377	A	20000906	ZA 2000-1377	20000317 <--
US 6540881	B1	20030401	US 2000-532225	20000322 <--
CN 1270952	A	20001025	CN 2000-105374	20000331 <--
CN 1183084	C	20050105		
PRIORITY APPLN. INFO.:			JP 1999-93859	A 19990331
OS.CITING REF COUNT:	5	THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)		
REFERENCE COUNT:	3	THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L9 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AB Tetrahydrobenzyl alc. (I) is esterified with (meth)acrylic acid in the presence of O₂-containing gases and polymerization inhibitors of (1) (A) quinones, hindered phenols, nitrosoamines, and/or phenylenediamines or (B) phenothiazines, RR'NOH (R, R' = H, alkyl, aryl), Cu(S₂CNR₁₂)₂ (R₁ = alkyl, aryl), and/or Fe(S₂CNR₁₂)₃ or (2) (A') hydroquinone, hydroquinone monomethyl ether (II), benzoquinone, 3,5-di-tert-butyl-4-hydroxytoluene (III), N-nitrosodiphenylamine, and/or N,N'-diphenylphenylenediamine or (B') phenothiazine, Cu(S₂CNMe₂)₂ (IV), Cu(S₂CNMe₂)₂, Cu(S₂CNPr₂)₂, Fe(S₂CNMe₂)₃, and/or Et₂NOH, and the resulting crude solution is distilled with O₂-containing gases and the above polymerization inhibitors for purification. Alternatively, the esterification is carried out by using the gases and the inhibitors of A', and the resulting solution is distilled with the gases and the inhibitors of B'. Thus, a solution of I was bubbled with air and reacted with methacrylic acid in the presence of a catalyst and polymerization inhibitors of II and III. Then, the product solution after catalyst removal was refluxed with IV to give tetrahydrobenzyl methacrylate with yield 84%.

ACCESSION NUMBER: 1998:421476 CAPLUS
DOCUMENT NUMBER: 129:82071
ORIGINAL REFERENCE NO.: 129:16951a,16954a
TITLE: Manufacture of tetrahydrobenzyl (meth)acrylate by using polymerization inhibitors and oxygen gas for reaction efficiency
INVENTOR(S): Fujiwara, Keisuke
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10175919	A	19980630	JP 1996-353733	19961218 <--
PRIORITY APPLN. INFO.:			JP 1996-353733	19961218
OTHER SOURCE(S):	MARPAT	129:82071		
OS.CITING REF COUNT:	1	THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)		

L9 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AB Acrylic and methacrylic acids are esterified (using a standard acid catalyst) in the presence of a Cu compound, a phenol, and O to prevent polymerization or discoloration of the ester. Thus, a mixture of 1,3-butanediol 45, acrylic acid 83, H₂SO₄ 1.5, CuSO₄·5H₂O 0.02, and p-MeOC₆H₄OH (I) [150-76-5] 0.02 part in C₆H₆ was treated 6 hr at 78-85° with 50 ml/min air to give 81 parts 1,3-butanediol diacrylate [19485-03-1] containing 30 ppm I, no Cu, and no polymer. In the absence of air or I polymer was formed or the product was colored, resp. Similarly prepared are pentaerythritol acrylate [55919-77-2], trimethylolpropane triacrylate [15625-89-5], trimethylolethane trimethacrylate [24690-33-3], and a C₁₀-C₁₅ alkyl methacrylate mixture

ACCESSION NUMBER: 1976:463953 CAPLUS
DOCUMENT NUMBER: 85:63953
ORIGINAL REFERENCE NO.: 85:10303a,10306a
TITLE: Acrylates or methacrylates
INVENTOR(S): Kimura, Kaoru; Sakabe, Kazuyuki
PATENT ASSIGNEE(S): Toa Gosei Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

DOCUMENT TYPE: CODEN: JKXXAF
LANGUAGE: Patent
FAMILY ACC. NUM. COUNT: Japanese
1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 51029432	A	19760312	JP 1974-100567	19740903 <--
PRIORITY APPLN. INFO.:			JP 1974-100567	A 19740903

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LOGOFF? (Y)/N/HOLD:y
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